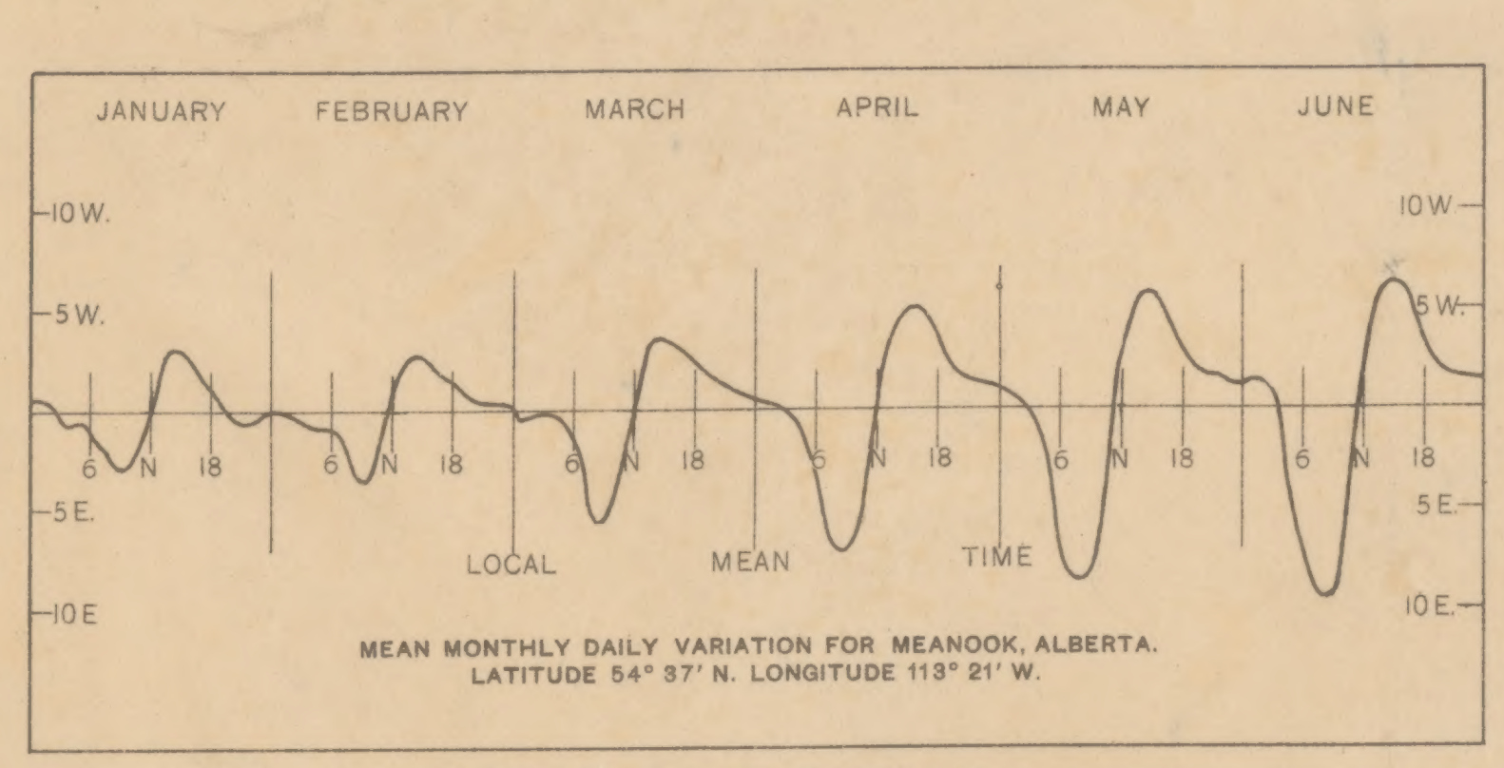
MAP COLLECTION
UNIVERSITY OF ALBERTA
EDMONTON, ALBERTA
CANADA

Western Canada C-23 (1922) ([illegible])

ISOMAGNETIC MAPS OF WESTERN CANADA FOR 1922.0



MEAN MONTHLY DAILY VARIATION FOR MEANOOK, ALBERTA.
LATITUDE 54° 37′ N. LONGITUDE 113° 21′ W.

Compiled from records of Meteorological Service.

DEPARTMENT OF THE INTERIOR
CANADA
HON. CHARLES STEWART, MINISTER
W. W. CORY, DEPUTY MINISTER
TOPOGRAPHICAL SURVEYS BRANCH

The magnetic results shown on the declination map were compiled from observations taken at more than 20,000 stations of which the observations made by the Topographical Surveys Branch from 1907 to the end of 1921 were as follows:

Manitoba	2,927
Saskatchewan	5,785
Alberta	6,398
British Columbia	2,236
Northwest Territories	382
Total	17,728

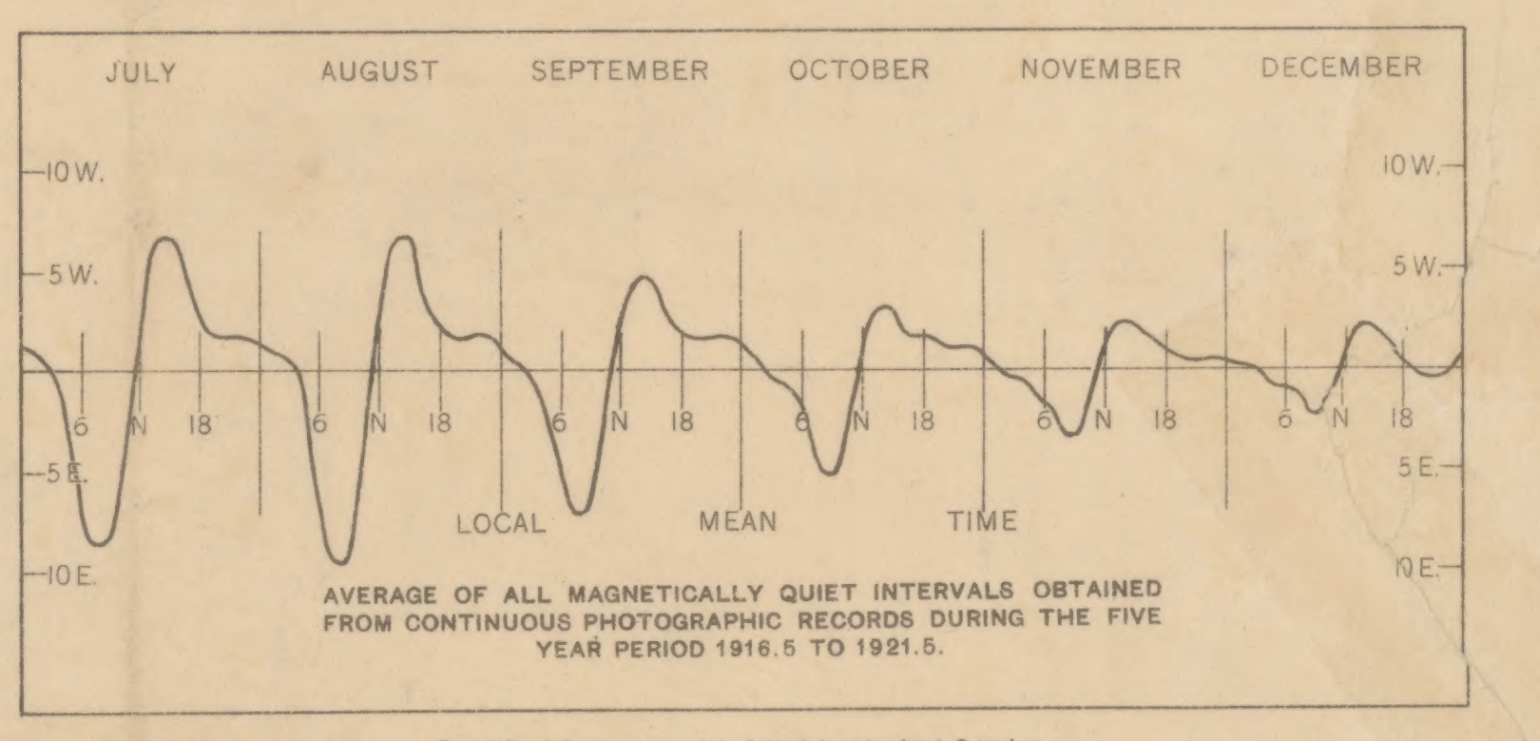
Observations available from the following sources were also used: The Dominion Meteorological Service; The Carnegie Institution of Washington; The Geological Survey of Canada; The Dominion Observatory; The United States Coast and Geodetic Survey; Sir J. H. Lefroy; Sir George Back; Dr. Rae; Sir John Richardson; Thos. Simpson, Esq.; Sir John Franklin; Capt. E. W. Parry; Sir John Ross, etc., etc.

The magnetic results shown on the Inclination and Horizontal Intensity maps were compiled from observations taken at more than 1200 stations.

The observations were made principally by the Topographical Surveys Branch and were supplemented by the observations of the above authorities.

The magnetic charts of the British Admiralty and of the United States Coast and Geodetic Surveys were also used.

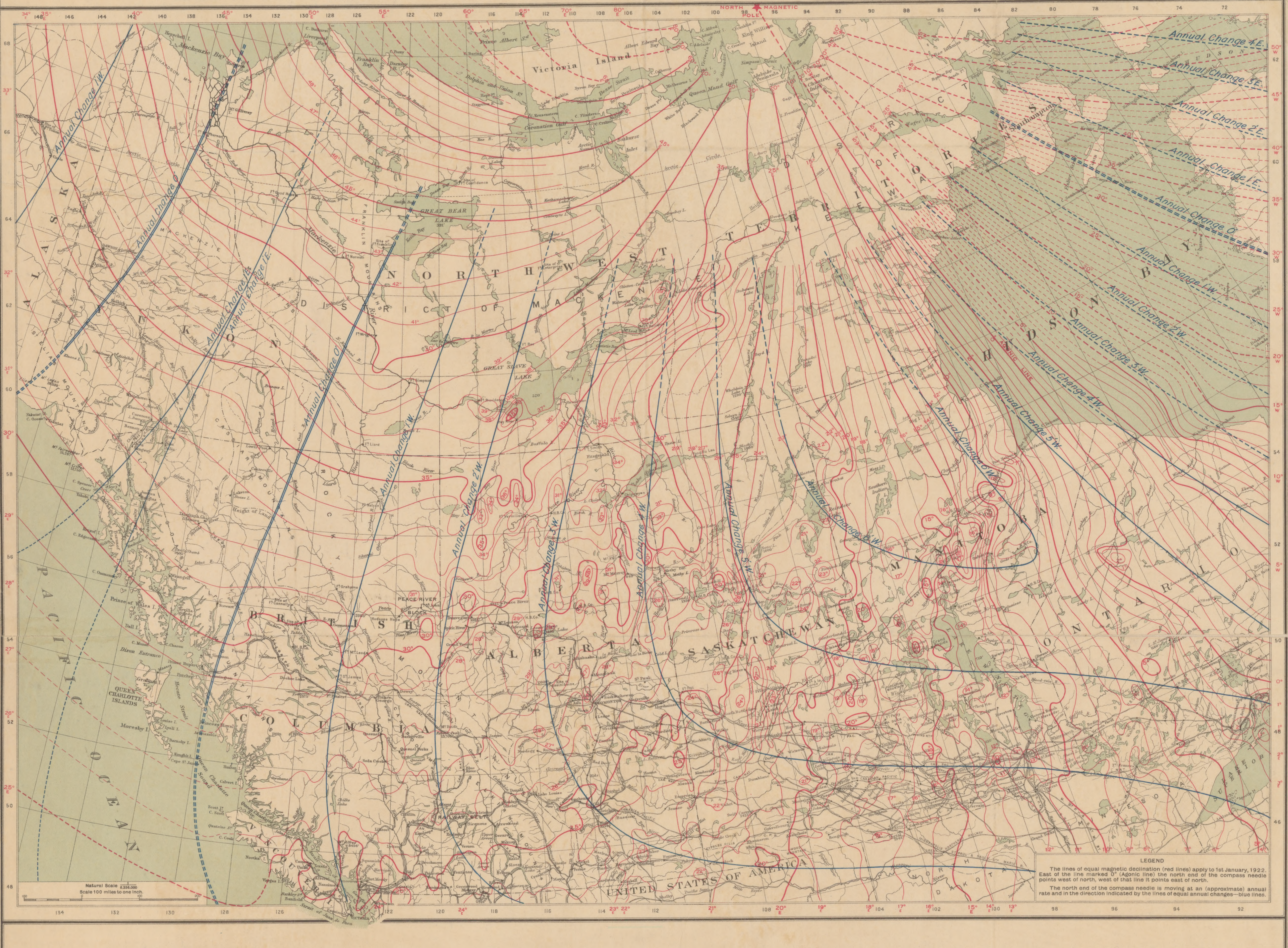
W. H. Herbert, B.Sc., Magnetician
H. J. Dunlap, B.Sc., Assistant Magnetician



AVERAGE OF ALL MAGNETICALLY QUIET INTERVALS OBTAINED FROM CONTINUOUS PHOTOGRAPHIC RECORDS DURING THE FIVE YEAR PERIOD 1916.5 TO 1921.5.

Compiled from records of Meteorological Service.

LINES OF EQUAL MAGNETIC DECLINATION AND OF EQUAL ANNUAL CHANGE IN WESTERN CANADA FOR 1922.0



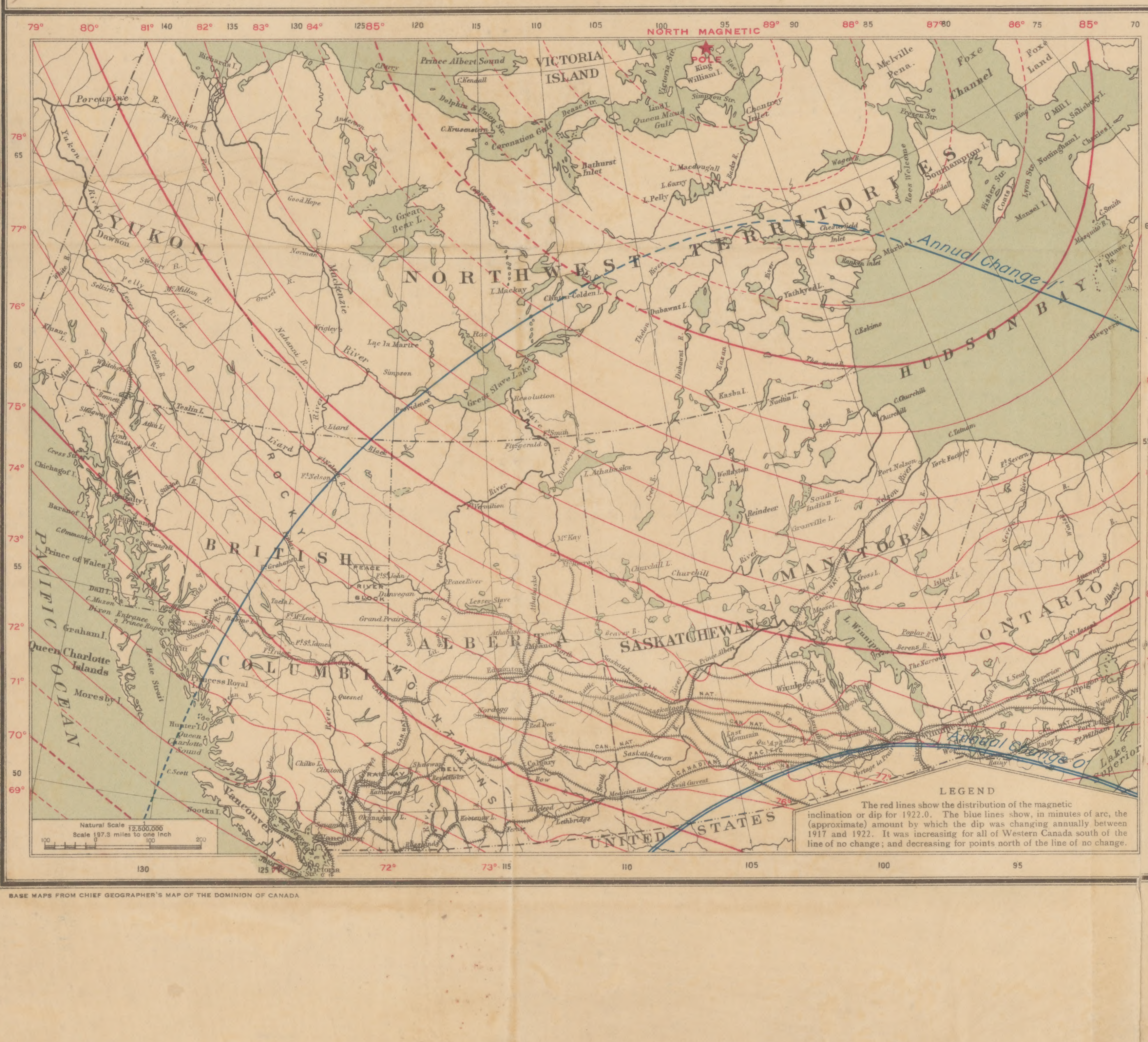
Natural Scale $\frac{1}{6,336,000}$
Scale 100 miles to one inch.

LEGEND

The lines of equal magnetic declination (red lines) apply to 1st January, 1922. East of the line marked 0° (Agonic line) the north end of the compass needle points west of north, west of that line it points east of north.

The north end of the compass needle is moving at an (approximate) annual rate and in the direction indicated by the lines of equal annual changes—blue lines.

LINES OF EQUAL MAGNETIC INCLINATION IN WESTERN CANADA FOR 1922.0 AND OF EQUAL ANNUAL CHANGE BETWEEN 1917.0 AND 1922.0

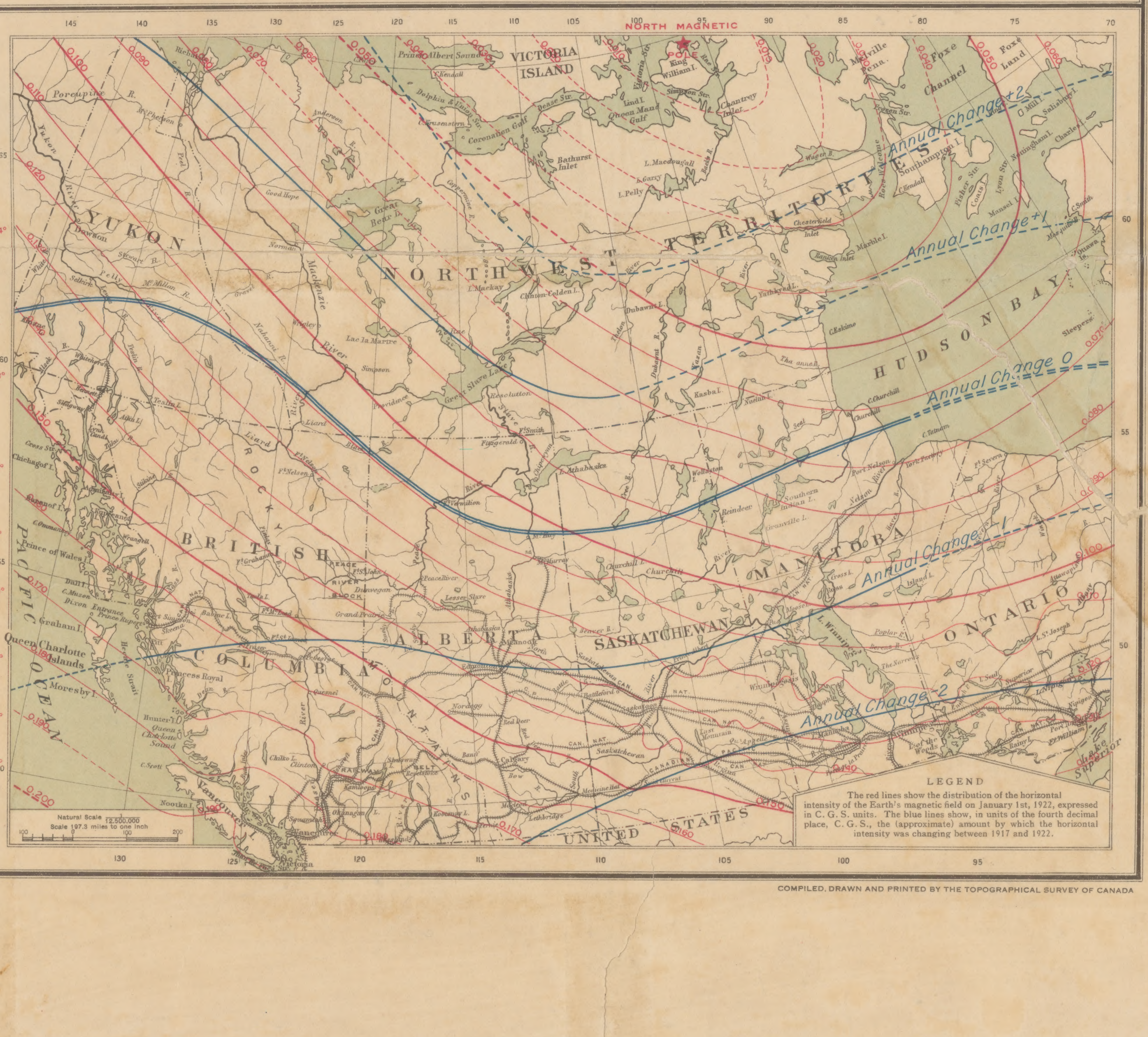


Natural Scale $\frac{1}{12,500,000}$
Scale 197.3 miles to one inch

LEGEND

The red lines show the distribution of the magnetic inclination or dip for 1922.0. The blue lines show, in minutes of arc, the (approximate) amount by which the dip was changing annually between 1917 and 1922. It was increasing for all of Western Canada south of the line of no change; and decreasing for points north of the line of no change.

LINES OF EQUAL MAGNETIC HORIZONTAL INTENSITY IN WESTERN CANADA FOR 1922.0 AND OF EQUAL ANNUAL CHANGE BETWEEN 1917.0 AND 1922.0



Natural Scale $\frac{1}{12,500,000}$
Scale 197.3 miles to one inch

LEGEND

The red lines show the distribution of the horizontal intensity of the Earth's magnetic field on January 1st, 1922, expressed in C. G. S. units. The blue lines show, in units of the fourth decimal place, C. G. S., the (approximate) amount by which the horizontal intensity was changing between 1917 and 1922.

BASE MAPS FROM CHIEF GEOGRAPHER'S MAP OF THE DOMINION OF CANADA

COMPILED, DRAWN AND PRINTED BY THE TOPOGRAPHICAL SURVEY OF CANADA